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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/560,509
Filing Date: April 27, 2000
Appellant(s): MEYER ET AL.

Steve E. Dicke
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed April 16, 2004.

(1) *Real Party in Interest*

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A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

Appellant's brief includes a statement that the following claims: Claims 1, 2 and 4-13;

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Claims 14 and 16; Claims 17, 18 and 20-23; Claim 24 and Claims 25-31 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) *Prior Art of Record*

6,405,251

Bullard et al.

6-2002

(10) *Grounds of Rejection*

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 4-14, 16-18 and 20-31 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,405,251 by Bullard et al.

In claim 1, Bullard teaches about a network usage recording system comprising (Col 1, lines 15-30):

A collector “ data collector system” including (Col 15, lines 45-65):

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an encapsulator “NAR processing (Fig 14, 306, 302)” for reading a plurality of network data records from a network data source and converting the network data records to a plurality of normalized metered events (Col 15, lines 45-65);

an aggregator for processing the normalized metered events to create aggregated normalized metered events (Col 15, lines 60-65); and

data storage system “Local store , (Fig 14, 314)” ,wherein the aggregator periodically stores the aggregated normalized metered events in the data storage system (Col 16, lines 1-10).

a configuration server “Policy Server, (Fig 31, 754)” (Col 32, lines 43-67), (Fig 22) in communication with the encapsulator, the aggregator and the data storage system, wherein the configuration server stores configuration data for the encapsulator, the aggregator and the data storage system, and the data storage system (Col 23, lines 10-25) that determines whether the collector operates as a network data collector or a correlator collector (Fig 14, 308) (Col 15, lines 45-65).

In claim 2, Bullard teaches about a system of claim 1, wherein the aggregator includes volatile memory “Local store , (Fig 14, 314)” for temporary storage of the aggregated normalized metered events (Col 20, lines 10-30).

In claim 4, Bullard teaches about a system of claim 1, wherein the configuration server communicates the configuration data to the encapsulator, the aggregator and the data storage system at start-up “ service provision” (Col 20, lines 10-30).

In claim 5, Bullard teaches about a system of claim 1, further comprising a collector shell “equipment interface” (Col 16, lines 10-35), wherein the configuration server communicates

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with the encapsulator, the aggregator and the data storage system via a collector shell (Col 32, lines 43-67).

In claim 6, Bullard teaches about a system of claim 1, further comprising a query manager “SQL database management system” in communication with the data storage system for querying the data storage system (Col 18, lines 39-67).

In claim 7, Bullard teaches about a system of claim 6, wherein the query manager is in communication with the data storage system via the aggregator (Col 18, lines 39-67).

In claim 8, Bullard teaches about a system of claim 1, further comprising a statistics log, wherein the statistics log is in communication with the encapsulator, the aggregator and the data storage system for logging statistical data (Col 6, lines 1-15).

In claim 9, Bullard teaches about a system of claim 8, further comprising a collector operator, wherein the collector operator “service management” communicates with the encapsulator, the aggregator, the data storage system and the statistics log (Col 6, lines 1-15) to provide administrative access (Col 32, lines 30-60).

In claim 10, Bullard teaches about a system of claim 1, wherein the encapsulator further includes a parser for parsing “integrity analysis of specific data” network data received from the network data source (Col 10, lines 45-65).

In claim 11, Bullard teaches about a system 1, wherein the collector is configured as a network data collector “data collector system” (Col 16, lines 1-10).

In claim 12, Bullard teaches about a system of claim 1, wherein the collector is configured as a correlator collector (Col 15, lines 60-65).

In claim 13, Bullard teaches about a system of claim 1, wherein the collector is configured to perform additional levels of data reduction and consolidation of data stored in other collectors (Col 19, lines 1-30).

In claim 14, Bullard teaches about a network usage recording system comprising:
a collector system including:

- a collector shell “equipment interface” (Col 16, lines 10-25);
- a query manager “SQL database management system” (Col 18, lines 39-67);
- an encapsulator “NAR processing (Fig 14, 306, 302)” (Col 16, lines 10-25);
- an aggregator (Col 15, lines 60-65);
- a data storage system “Local store, (Fig 14, 314)” (Col 16, lines 1-10); and
- a configuration server “Policy Server, (Fig 31, 754)” (Col 32, lines 43-67), (Fig 22) in communication with the encapsulator, the aggregator and the data storage system, the configuration server stores configuration data for collect (Col 23, lines 10-25) that determines whether the collector system operates as a network data collector or a correlator collector (Fig 14, 306, 308) (Col 15, lines 45-65).

In claim 16, Bullard teaches about a system of claim 14, wherein the configuration server communicates with the encapsulator, the aggregator and the data storage system via the collector shell “equipment interface” (Col 16, lines 10-25), (Col 32, lines 43-67).

In claim 17, Bullard teaches about a method for recording network usage comprising the steps of (Col 1, lines 15-30):

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defining a collector including an encapsulator, an aggregator and a data storage system (Col 15, lines 45-65);

operating the encapsulator to read a plurality of network data records from a network data source and convert the network data records to a plurality of normalized metered events (Col 18, lines 39-67);

aggregating the plurality of normalized metered events to create a plurality of aggregated normalized metered events (Col 16, lines 38-50); and

storing the aggregated normalized metered events in the data storage system "Local store , (Fig 14, 314)" at periodic intervals " time stamp" (Col 9, lines 55-67);

defining a configuration server " Policy Server, (Fig 31, 754)" (Col 32, lines 43-67), (Fig 22) in communication with the encapsulator, the aggregator and the data storage system, storing configuration data for the encapsulator, the aggregator and the data storage system in the configuration server (Col 23, lines 10-25) where the configuration data determines whether the collector operates as a network data collector or a correlator collector (Fig 14, 306, 308) (Col 15, lines 45-65).

In claim 18, Bullard teaches about a method of claim 17, further comprising the steps of defining the aggregator to include volatile memory and storing the aggregated normalized metered events temporarily in the volatile memory "Local store , (Fig 14, 314)" ,(Col 20, lines 10-30).

In claim 20, Bullard teaches about a method of claim 17, further comprising the step of transferring the configuration data to the encapsulator, the aggregator and the data storage system at start-up "service provisioning" (Col 32, lines 43-67), (Fig 31).

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In claim 21, Bullard teaches about a method of claim 17, further comprising the step of defining a query manager in communication with the data storage system for managing queries of the data storage system “SQL database management system” (Col 18, lines 39-67).

In claim 22, Bullard teaches about a method of claim 17, further comprising the step of defining a statistics log in communication with the encapsulator, the aggregator and the data storage system, and collecting statistics associated with the encapsulator, the aggregator and the data storage system in the statistics log (Col 6, lines 1-15).

In claim 23, Bullard teaches about a method of claim 17, further comprising the step of parsing “integrity analysis of specific data” the network data records from the usage data source read by the encapsulator (Col 10, lines 45-60).

In claim 24, Bullard teaches about a computer readable medium containing instructions for controlling a computer system to perform a method for recording network usage comprising the steps of (Col 1, lines 15-30):

defining a collector “data collector system” including an encapsulator, an aggregator and a data storage system (Col 15, lines 45-65);

operating the encapsulator “NAR processing (Fig 14, 306, 302)” to read a plurality of network data records from a network data source and convert the network data records to a plurality of normalized metered events (Col 16, lines 35-55);

aggregating the plurality of normalized metered events to create a plurality of aggregated normalized metered events (Col 16, lines 60-65);

storing the aggregated normalized metered events in the data storage system “Local store , (Fig 14, 314)” at periodic intervals “time stamp” (Col 9, lines 55-67); and

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defining a configuration server “ Policy Server, (Fig 31, 754)” (Col 32, lines 43-67), (Fig 22) in communication with the encapsulator, the aggregator and the data storage system; and

storing configuration data for the encapsulator, the aggregator and the data storage system in the configuration server (Col 23, lines 10-25) where the configuration - determines whether the collector operates as a network data collector or a correlator collector (Fig 14, 306, 308) (Col 15, lines 45-65).

In claim 25, Bullard teaches about a network usage recording system comprising:

a plurality of configurable collectors “ data collectors” (Col 22, lines 10-25), where each collector configurable to operate as one of a plurality of collector types “set of metrics” (Col 22, lines 10-25), the collector types including a data collector and a correlator collector (Col 15, lines 45-65);

a configuration server “ Policy Server, (Fig 31, 754)” (Col 32, lines 43-67), (Fig 22) in communication with each configurable collector , where the configuration server stores configuration data for each configurable collector (Col 23, lines 10-25) that determines the collector type for each collector “service management feedback”, and once the configuration data is transferred to each configurable collector, each collector becomes the collector type associated with the configuration data (Fig 14, 308) (Col 32, lines 30-65).

In claim 26, Bullard teaches about a system of claim 25, wherein the collector types include an aggregator collector (Col 15, lines 60-65).

In claim 27, Bullard teaches about a system of claim 25, where each configurable collector includes three configurable components: an encapsulator “ NAR processing (Fig 14, 306, 302)”, an aggregator (Col 15, lines 60-65) and a data storage system “Local store , (Fig 14, 314)”.

In claim 28, Bullard teaches about a system of claim 27, where the configuration data includes encapsulator configuration data, aggregator configuration data and data storage system configuration data (Col 32, lines 30-65).

In claim 29, Bullard teaches about a system of claim 27, wherein the configuration data includes aggregator configuration data, and where the aggregator configuration data includes a flush policy “ update and moving data with respect to time at local store ” , aggregation scheme and rules (Col 16, lines 1-15).

In claim 30, Bullard teaches about a system of claim 25, where each configurable collector independently queries (Col 6, lines 30-55) the configuration server for configuration data, and the configuration server transfers the configuration data for each configurable collector to the corresponding configurable collector (Col 32, lines 30-65).

In claim 31, Bullard teaches about a system of claim 30, where each configurable collector queries the configuration server at start-up “ service provisioning” of the configurable collector (Col 32, lines 30-65).

(11) Response to Argument Filed April 16, 2004

In reply to argument I. "The rejection of claims 1,2 and 4-13 under 35 U.S.C. 102(e).

a. Bullard does not teach the Encapsulator:

In applicant's specification page 13, lines 10-16, the function of an Encapsulator is to take a raw data format and convert it in a standard format. In the prior art Network Accounting Records (NARs) are defined as the converted form of data that has been normalized (standardized) (Col 3, lines 45-55). The function of the data collector as disclosed in Bullard is to convert from a non-normalized data form (raw) to a normalized form (standard). This function is consistent with the function of the Encapsulator as defined by applicant.

b. Bullard does not teach the Aggregator:

In applicant's specification page 13, lines 15-25, the function of an Aggregator is to take data from the Encapsulator (standard data) and aggregate them to form new standardized data. The aggregated result (NAR) is then transfer to temporary storage. The prior art defines metrics as being a component of the Network Accounting Records (NARs) (Col 8, lines 1-6). The prior art disclosed the aggregation of metrics values (standard data) to create new NARs that are stored for some aggregated period (temporary storage) prior to being released to a FAP (Col 21, line 50-65). This function is consistent to the Aggregator as claimed.

c. Bullard does not teach the Data storage system:

The Data storage system as claimed, provides the periodic function of storing NARs for the aggregator. Prior art teaches about an aggregator store (Fig 20, 408)(Col 21, lines 25-30) that temporary store NARs in conjunction with the aggregating process.

d. Bullard does not teach the configuration server:

The configuration server as claimed provides the configuration data (software) that defines the function of the Encapsulator, Aggregator and Data storage system. The server supports the option where the collector operates as a network data collector or a correlator collector (Specification defines correlator as a collector of collectors Page 18, lines 8-10). Prior art teaches about a configuration file that is used to configure a flow data collector. The flow data collect contains the following:

Encapsulator "NAR constructor 306 for converting data gathered by the equipment interface (EI) 16 (shown in dashed lines) from a network device or technology ("network entity") into NAR format" (Col 15, lines 50-55);

Aggregator (Col 15, lines 60-65) "aggregator 312 for processing the constructed NARs as appropriate" which has it associated memory (Data storage system) which is described above; and

Correlator collects from flow data collectors (FDC 1 and FDC 2)(Fig 18, 442), (Col 15, line 60-65).

In the prior art, the function of data collector and correlator collector exist together and the system does not allow the option of choosing one function over another. The adjustable feature of applicant invention is not considered to be patentable over the prior art being that both features are available in the prior art.

Prior art discloses a service management loop that includes a service provisioning application that produces a configuration file. The action of producing a configuration file that

is sent over a network to configure a network element (include Flow Data Collect), in itself, constitutes a service, which is consistent with the function of a server (Col 32, lines 30-45).

In reply to argument II: “The rejection of claims 14 and 16 under 35 U.S.C. 102(e).

e. Bullard does not teach the collector shell:

The specification discloses a Collector shell as an interface between the configuration server and Encapsulator, Aggregator and Data storage system (Page 19, lines 1-5). The function of the Collector shell is to retrieve configuration data from the configuration server on the behalf of the above functions. This data is executed in the configuration memory (operating memory) in order to realize the above functions. This is equivalent to a bootstrapping process, which occurs in all computers at startup. At start up the operating memory “local store” contains no intelligent function and cannot act on its own. To realize the above functions, the operating memory has to be loaded with software (configuration data) and functioning. This is accomplished by loading a boot code from a non-volatile memory. The boot code as in the case of the Collector shell acts as a go between (interface) in the transfer of configuration data from the software storage (configuration server) to the operating memory “local store”(Col 15, line 65- Col 15, line 20).

f. Bullard does not teach a query manager:

The specification discloses a query manger as an interface between aggregator or collectors and data storage system (Page 19, lines 10-15). Prior art discloses a Flow Aggregation Processor (FAP) “aggregator” that is associated with an aggregator store 408 “data storage system” and Flow Data Collectors (FDC) “collectors”. A SQL database management system is

disclosed which provide the interface function (by using SQL calls) of moving NARs from FDC “collectors” to FAP “aggregator”. NARs that are created as a result of FDC and FAP operations (discuss above) are moved to database storage (which includes aggregator store 408 “data storage system”) using the interface function of the SQL database management system (Col 18, lines 50-67).

In reply to argument III: “The rejection of claims 17, 18 and 20-23 under 35 U.S.C. 102(e).

The Response is the same as argument I, which covers the system while argument III covers the method.

In reply to argument IV: “The rejection of claims 24 under 35 U.S.C. 102(e).

The Response is the same as argument I, which covers the system while argument IV covers the computer medium that contain the instruction for operation (This is the local store that was discussed in argument II).

In reply to argument V: “The rejection of claims 25-31 under 35 U.S.C. 102(e).

In response to the plurality of configuration collectors:

Prior art teaches about using a plurality of collector type (FAP and FDC) (Fig 21) (Col 22, lines 10-25). Data collectors are mapped to (FDC, 562 (a-e)) and Correlate collector (FAP, 564a, 564b).

The argument as to the configuration server was discussed in argument I.

For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,




MD

June 14, 2004


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